

**Albert, Félicie**, Lawrence Livermore National Laboratory, Livermore, CA, “Laser Driven X-ray Sources for High Energy Density Science Experiments,” selected by the Office of Fusion Energy Sciences.

**Allison, Thomas K.**, Stony Brook University, Stony Brook, NY, “Ultrafast Dynamics of Molecules on Surfaces Studied with Time-Resolved XUV Photoelectron Spectroscopy,” selected by the Office of Basic Energy Sciences.

**Anna, Jessica M.**, University of Pennsylvania, Philadelphia, PA, “Tracking Photochemical and Photophysical Processes for Solar Energy Conversion via Multidimensional Electronic and Vibrational Spectroscopic Methods,” selected by the Office of Basic Energy Sciences.

**Baalrud, Scott D.**, University of Iowa, Iowa City, IA, “Transport Properties of Magnetized High-Energy-Density Plasma,” selected by the Office of Fusion Energy Sciences.

**Badu-Tawiah, Abraham K.**, The Ohio State University, Columbus, OH, “Visible Light Photo-Catalysis in Charged Micro-Droplets,” selected by the Office of Basic Energy Sciences.

**Barraza-Lopez, Salvador**, University of Arkansas, Fayetteville, AR, “Quantum Phenomena in Few-Layer Group IV Monochalcogenides: Interplay among Structural, Thermal, Optical, Spin, and Valley Properties in 2D,” selected by the Office of Basic Energy Sciences and the DOE Experimental Program to Stimulate Competitive Research.

**Bruggeman, Peter J.**, University of Minnesota, Minneapolis, MN, “Non-Equilibrium Plasma-Interactions with Biomaterials, Biological Solutions and Tissues,” selected by the Office of Fusion Energy Sciences.

**Cheung, Alvin**, University of Washington, Seattle, WA, “Using Verified Lifting to Optimize Legacy Stencil Codes,” selected by the Office of Advanced Scientific Computing Research.

**Ciston, Jim**, Lawrence Berkeley National Laboratory, Berkeley, CA, “MAPSTER Microscopy: Multimodal Acquisition of Properties and Structure with Transmission Electron Reciprocal-space Microscopy,” selected by the Office of Basic Energy Sciences.

**Couch, Sean M.**, Michigan State University, East Lansing, MI, “The Core-collapse Supernova Sensitivity Machine,” selected by the Office of Nuclear Physics.

**Cusack, Daniela F.**, University of California, Los Angeles, Los Angeles, CA, “Consequences of Plant Nutrient Uptake for Soil Carbon Stabilization,” selected by the Office of Biological and Environmental Research.

**Du, Yingge**, Pacific Northwest National Laboratory, Richland, WA, “Controlling Atomically Precise Ordering and Phase Transitions in Oxide Thin Films,” selected by the Office of Basic Energy Sciences.

**Engle, Jonathan W.**, Los Alamos National Laboratory, Los Alamos, NM, “Nuclear Data for Spallation Neutron Radioisotope Production,” selected by the Office of Nuclear Physics.

**Eremeev, Grigory V.**, Thomas Jefferson National Accelerator Facility, Newport News, VA, “Formation of Superconducting Nb<sub>3</sub>Sn Phase for Superconducting Radio Frequency (SRF) Cavities,” selected by the Office of Nuclear Physics.

**Evangelista, Francesco A.**, Emory University, Atlanta, GA, “Advanced Electronic Structure Theories for Strongly Correlated Ground and Excited States,” selected by the Office of Basic Energy Sciences.

**Flint, Rebecca**, Iowa State University, Ames, IA, “Exotic Kondo Phases: the Non-Kramers Doniach Phase Diagram,” selected by the Office of Basic Energy Sciences.

**Fout, Alison R.**, University of Illinois, Champaign, IL, “Bio-inspired Catalysts Featuring Earth Abundant Metals and Secondary Coordination Sphere Interactions for the Reduction of Oxyanions,” selected by the Office of Basic Energy Sciences.

**Gates, Jacklyn M.**, Lawrence Berkeley National Laboratory, Berkeley, CA, “Mass Measurements and Decay Spectroscopy of the Heaviest Elements,” selected by the Office of Nuclear Physics.

**Hahn, Kristian A.**, Northwestern University, Evanston, IL, “Dark Matter and Track Triggering with the CMS Experiment,” selected by the Office of High Energy Physics.

**Hofmockel, Kirsten S.**, Pacific Northwest National Laboratory, Richland, WA, “Molecular Interactions of the Plant-Soil-Microbe Continuum of Bioenergy Ecosystems,” selected by the Office of Biological and Environmental Research.

**Hong, Xia**, University of Nebraska, Lincoln, NE, “Nanoscale Ferroelectric Control of Novel Electronic States in Layered Two-Dimensional Materials,” selected by the Office of Basic Energy Sciences and the DOE Experimental Program to Stimulate Competitive Research.

**Hsu, Shih-Chieh**, University of Washington, Seattle, WA, “Search for Dark Matter using mono-Higgs and the ATLAS Pixel Detector,” selected by the Office of High Energy Physics.

**Humble, Travis S.**, Oak Ridge National Laboratory, Oak Ridge, TN, “Accelerating Applications of High-Performance Computing with Quantum Processing Units,” selected by the Office of Advanced Scientific Computing Research.

**Jin, Yier**, University of Central Florida, Orlando, FL, “Resilient and Robust High Performance Computing Platforms for Scientific Computing Integrity,” selected by the Office of Advanced Scientific Computing Research.

**Kolasinski, Robert D.**, Sandia National Laboratories, Livermore, CA, “Characterizing the Dynamic Response of Surfaces to Plasma Exposure,” selected by the Office of Fusion Energy Sciences.

**Kolemen, Egemen**, Princeton University, Princeton, NJ, “Physics-Based Real-time Analysis and Control to Achieve Transient-Free Operations for the ITER Era,” selected by the Office of Fusion Energy Sciences.

**Krogstad, Jessica A.**, University of Illinois, Champaign, IL, “Dynamic, Robust, Radiation-Resistant Ceramics: Harnessing Thermodynamic and Kinetic Driving Forces,” selected by the Office of Basic Energy Sciences.

**Lehner, Christoph**, Brookhaven National Laboratory, Upton, NY, “New Methods Enabling a Precise First-Principles Computation of the Muon Anomalous Magnetic Moment,” selected by the Office of High Energy Physics.

**Mayes, Melanie A.**, Oak Ridge National Laboratory, Oak Ridge, TN, “A Comprehensive Framework for Modeling Emissions from Tropical Soils and Wetlands,” selected by the Office of Biological and Environmental Research.

**McFarlane, Karis J.**, Lawrence Livermore National Laboratory, Livermore, CA, “Tropical Forest Response to a Drier Future: Turnover Times of Soil Organic Matter, Roots, Respired CO<sub>2</sub>, and CH<sub>4</sub> across Moisture Gradients in Time and Space,” selected by the Office of Biological and Environmental Research.

**Mitchell, Chad**, Lawrence Berkeley National Laboratory, Berkeley, CA, “Compensation of Nonlinear Space Charge Effects for Intense Beams in Accelerator Lattices,” selected by the Office of High Energy Physics.

**Moran, James J.**, Pacific Northwest National Laboratory, Richland, WA, “Spatially Resolved Rhizosphere Function: Elucidating Key Controls on Nutrient Interactions,” selected by the Office of Biological and Environmental Research.

**Muchero, Wellington**, Oak Ridge National Laboratory, Oak Ridge, TN, “Host-Microbial Genetic Features Mediating Symbiotic Interactions in the Bioenergy Crop *Salix*,” selected by the Office of Biological and Environmental Research.

**Neidig, Michael L.**, University of Rochester, Rochester, NY, “Electronic Structure, Bonding and Reactivity in f-Element Chemistry,” selected by the Office of Basic Energy Sciences.

**Neilson, Jamie R.**, Colorado State University, Fort Collins, CO, “Informed Materials Design Principles from Local Structures and Dynamics In Hybrid Inorganic-Organic Perovskite Halides,” selected by the Office of Basic Energy Sciences.

**Nowack, Katja C.**, Cornell University, Ithaca, NY, “Magnetic Imaging of Topological Phases of Matter,” selected by the Office of Basic Energy Sciences.

**Peay, Kabir G.**, Stanford University, Palo Alto, CA, “Does Mycorrhizal Symbiosis Determine the Climate Niche for *Populus* as a Bioenergy Feedstock?,” selected by the Office of Biological and Environmental Research.

**Posen, Sam**, Fermi National Accelerator Laboratory, Batavia, IL, “Developing the Next Generation of Superconducting RF Cavities with Nb<sub>3</sub>Sn,” selected by the Office of High Energy Physics.

**Raaf, Jennifer L.**, Fermi National Accelerator Laboratory, Batavia, IL, “Coming in from the Cold: A High-Pressure Gaseous Argon Time Projection Chamber as an Option for the DUNE Near Detector,” selected by the Office of High Energy Physics.

**Redshaw, Matthew**, Central Michigan University, Mount Pleasant, MI, “High-precision Penning trap Measurements of  $\beta$ -decay Q-values for Neutrino Physics,” selected by the Office of Nuclear Physics.

**Rozo, Eduardo**, University of Arizona, Tucson, AZ, “Constraining Dark Energy with Galaxy Clusters and Baryon Acoustic Oscillations,” selected by the Office of High Energy Physics.

**Schulman, Rebecca**, The Johns Hopkins University, Baltimore, MD, “Resilient Hydrogels from the Nanoscale to the Macroscale,” selected by the Office of Basic Energy Sciences.

**Sharp, Ian D.**, Lawrence Berkeley National Laboratory, Berkeley, CA, “Overcoming Charge Transport Limitations in Thin Film Semiconductor Photoelectrodes,” selected by the Office of Basic Energy Sciences.

**Shaw, John B.**, University of Arkansas, Fayetteville, AR, “The Dynamics and Stratigraphy of Distributary Channel Networks,” selected by the Office of Basic Energy Sciences and the DOE Experimental Program to Stimulate Competitive Research.

**Tamboli, Adele C.**, National Renewable Energy Laboratory, Golden, CO, “Harnessing Order Parameter in Ternary II-IV-V<sub>2</sub> Semiconductors,” selected by the Office of Basic Energy Sciences.

**van Tilborg, Jeroen**, Lawrence Berkeley National Laboratory, Berkeley, CA, “A Compact Laser-Plasma-Accelerator-Based FEL for Ultra-Fast Hyper-Spectral Experiments,” selected by the Office of Basic Energy Sciences.

**Webster, Clayton G.**, Oak Ridge National Laboratory, Oak Ridge, TN, “Mathematical Methods for Optimal Polynomial Recovery of High-Dimensional Systems from Noisy Data,” selected by the Office of Advanced Scientific Computing Research.

**Wen, Haidan**, Argonne National Laboratory, Lemont, IL, “Understanding Mesoscale Nonequilibrium Heterogeneity by Multimodal X-ray Imaging,” selected by the Office of Basic Energy Sciences.

**Wrede, Christopher**, Michigan State University, East Lansing, MI, “Critical Thermonuclear Reactions in Classical Novae and Type I X-ray Bursts,” selected by the Office of Nuclear Physics.